

# Save Our Water Supply:

## AVOID RUNOFF

Maintaining a safe, clean water supply is important for everyone's health. From farmers who need clean water to grow food to animals who need safe water to drink and live in, keeping our water unpolluted is vital to the Valley. That's why our storm water runoff needs to stay clean.

### What is runoff?

When raindrops splash onto the street and flow down the gutter, the water ends up in storm drains. This rainwater picks up contaminants along the way and carries them to ponding basins, canals, creeks or the San Joaquin River. The water can pick up motor oil, bug killers and trash, which end up seeping into our groundwater — and groundwater is our drinking water.



### Irrigation runoff is wasted water.

When the water from our irrigation systems runs off the soil or gets sprayed onto paved areas, it washes contaminants off plants and paved areas into our storm drains. Contaminants such as fertilizers, insecticides, weed killers, oils and grease can get carried into our storm drain system and may end up in our drinking water. By eliminating irrigation runoff, we reduce the risk of contaminating our water which can lead to costly water supply cleanup. You can also protect our groundwater by using fewer pesticides and avoiding toxic products.

### FOLLOW THE OUTDOOR WATERING SCHEDULE

The outdoor watering schedule is subject to change seasonally and during times of water shortage. For the current City of Fresno schedule, visit [www.fresno.gov/water](http://www.fresno.gov/water). To report water waste, or learn about our free landscape consultation services, call Water Conservation at 621-5480. You can also email us at [waterconservation@fresno.gov](mailto:waterconservation@fresno.gov).

*The City of Fresno thanks you for your cooperation in helping protect our community.*

## Tips For Avoiding Irrigation Runoff

Anyone who has ever seen a landscape being watered to the point where the water puddles and either runs down the sidewalk, into the gutter, or onto the street has witnessed "irrigation runoff." Runoff is often caused by sprinklers spraying onto paved areas and/or by running the irrigation station for too long. Monitor the spray pattern of sprinklers and install nozzles that are appropriate for the area. Then determine how long to run your irrigation cycle by doing the following:

### Step One: Detect the runoff point

Use a watch to determine the amount of time it takes to reach the runoff point from your irrigation system. Observe the beginning time on the watch; start your sprinklers and observe the irrigation until you see water accumulating (puddling) and/or running onto the sidewalks or gutters; again observe your watch. The runoff point is the length of time between when you first observed runoff and the beginning time. To prevent runoff do not exceed this short length of time during any one irrigation cycle.

### Step Two: Set your controller to cycle

Use the features on your sprinkler controller to your advantage. For example, if your landscape requires 12 minutes of irrigation and your runoff point is four minutes, then set three start times of four minutes each no more than two hours apart. Using short cycles not only stops runoff but allows time for the soil to absorb the water between applications.

Adjust your controller every month to allow for season changes. In the winter months, turn your controller to the "off" position and/or reduce the amount of irrigation. To help with water pressure set your controller start time(s) at odd times, such as 9:37 p.m. or 3:42 a.m., if your controller features allow you to do so.

### Step Three: Replace old or broken equipment

It's easier to avoid runoff in your garden when you have the proper equipment in working order. Many irrigation manufacturers make low-flow pop-up sprinklers. These sprinklers spray larger droplets, reduce precipitation rates and regulate water pressure. Simply check your local irrigation supplier to discuss these sprinkler features.

Spray nozzles come in 1/4, 1/3, 1/2, 3/4 or full circles. Make sure that all of your spray nozzles are at the proper angle for the area that you're watering. Adjustable arc spray nozzles are also available for odd-shaped areas.

## Water-Wise GARDENING TIPS

*Here are some ways to have a healthy garden while conserving water:*

- Choose plants classified by water needs of very low, low and medium that are appropriate for the Central Valley.
- Aerate lawns that are on compacted or heavy clay soils to increase water penetration into the soil and to reduce runoff.
- Mulch all flower beds with up to 4 inches of organic (bark, wood chips, newspaper, straw) or inorganic (gravel, shredded tires) material to reduce evaporation, moderate soil temperature and suppress weeds.
- Plants with similar water needs should be planted together.
- Adjust your irrigation controller to allow for weather conditions, plant needs and soil conditions.
- Consider drip irrigation — the most efficient method of irrigation. It's easy to install, whether converting a sprinkler system or starting from scratch.
- Reduce lawn size or eliminate unused lawn areas. Consider replacing them with low water-use ground cover plants or decorative mulch.
- Mow lawn higher during summer months to reduce plant water needs, reduce water evaporation from the soil surface, and suppress weeds.
- Apply only slow-release fertilizers that stay available to the plant for longer periods of time and do not encourage succulent, water-hungry growth.
- Periodically manually turn on your irrigation system to check for leaks and broken equipment, then make repairs.
- When checking the system, monitor the spray pattern of sprinklers and install nozzles that are appropriate for irrigated areas to avoid spraying water on paved surfaces.
- Sweep sidewalks and patios instead of hosing them off.



*For more information contact:*

UC Cooperative Extension Master Gardeners  
at (559) 241-7534 or <http://ucanr.org/sites/mgfresno>,  
or the City of Fresno Water Conservation Program  
at (559) 621-5480 or [www.fresno.gov/water](http://www.fresno.gov/water) or  
Email: [Waterconservation@fresno.gov](mailto:Waterconservation@fresno.gov).

To dispose of unused pesticides and other household hazardous waste, call the County of Fresno at (559) 262-4259 for a drop-off site near you.

For current watering schedule or to report water waste, visit [www.fresno.gov/water](http://www.fresno.gov/water) or call (559) 621-5480.

For Spanish or Hmong translation, please call (559) 621-5480.



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Fresno, CA 93703

## CREATING A FRESNO-FRIENDLY GARDEN

## PLANT CHOICES & WATER CONSERVATION TIPS

*for our climate*





# PLANT GUIDE

## For Low Water-Use Species

The plants listed in this brochure are water-wise, which means they require a minimal amount of water to thrive in the Central Valley as classified by Sunset’s Garden Climate Zone 8 or 9. Because plants have many common names, the botanical names are also listed. For more information on each plant, you may consult the *Sunset Western Garden Book* or other reliable sources.

**ZONE 8**  
**Cold-air Basins of California’s Central Valley**  
*Growing Season:* Mid-February through November. This is a valley floor with no maritime influence. Summers are hot; winter lows range from 29° to 13° F / -2° to -11° C. Rain comes in the cooler months.

**ZONE 9**  
**Thermal Belts of California’s Central Valley**  
*Growing Season:* Late February through December. Zone 9 is located in the higher elevations around Zone 8, but its summers are just as hot; its winter lows are slightly higher (temperatures range from 28° to 18° F / -2° to -8° C.) Rainfall pattern is the same as in Zone 8.



## TREES (plants are generally greater than 15 feet tall.)

COMMON NAME	Botanical Name
<input type="checkbox"/> Acacia <sup>E</sup>	<i>Acacia spp.</i> FS
<input type="checkbox"/> African Sumac <sup>E</sup>	<i>Rhus lancea</i> FS
<input type="checkbox"/> Arizona Cypress <sup>E</sup>	<i>Cupressus arizonica</i> FS
<input type="checkbox"/> Australian Willow <sup>E</sup>	<i>Geijera parviflora</i> FS
<input type="checkbox"/> Beefwood <sup>E</sup>	<i>Casuarina spp.</i> FS
<input type="checkbox"/> Bottlebrush <sup>E</sup>	<i>Callistemon spp.</i> FS
<input type="checkbox"/> Bottle Tree <sup>E</sup>	<i>Brachychiton populneus</i> FS
<input type="checkbox"/> California Buckeye <sup>D</sup>	<i>Aesculus californica</i> FS, MW
<input type="checkbox"/> Carob <sup>E</sup>	<i>Ceratonia siliqua</i> FS
<input type="checkbox"/> Chaste Tree <sup>D</sup>	<i>Vitex agnus-castus</i> FS
<input type="checkbox"/> Chinese Pistache <sup>D</sup>	<i>Pistacia chinensis</i> “Keith Davey” FS
<input type="checkbox"/> Chitalpa <sup>D</sup>	<i>Chitalpa tashkentensis</i> FS
<input type="checkbox"/> Crape Myrtle <sup>D</sup>	<i>Lagerstroemia indica</i> FS
<input type="checkbox"/> Deodar Cedar <sup>E</sup>	<i>Cedrus deodara</i> FS
<input type="checkbox"/> Desert Willow <sup>D</sup>	<i>Chilopsis linearis</i> FS
<input type="checkbox"/> Eucalyptus <sup>E</sup>	<i>Eucalyptus spp.</i> FS
<input type="checkbox"/> Fern Pine <sup>E</sup>	<i>Podocarpus gracilior</i> FS
<input type="checkbox"/> Fruitless Olive <sup>E</sup>	<i>Olea europaea</i> “Swan Hill” FS
<input type="checkbox"/> Goldenrain Tree <sup>D</sup>	<i>Koelreuteria paniculata</i> FS
<input type="checkbox"/> Incense Cedar <sup>E</sup>	<i>Calocedrus decurrens</i> FS
<input type="checkbox"/> Japanese Pagoda Tree <sup>D</sup>	<i>Sophora japonica</i> FS
<input type="checkbox"/> Maidenhair Tree <sup>D</sup>	<i>Ginkgo biloba</i> FS
<input type="checkbox"/> Oaks <sup>D, E</sup>	<i>Quercus spp.</i> FS
<input type="checkbox"/> Palo Verde <sup>D</sup>	<i>Cercidium spp.</i> FS, MW
<input type="checkbox"/> Pines <sup>E</sup>	<i>Pinus spp.</i> FS
<input type="checkbox"/> Pomegranate <sup>D</sup>	<i>Punica granatum</i> FS
<input type="checkbox"/> Smoke Tree <sup>D</sup>	<i>Cotinus coggygria</i> FS
<input type="checkbox"/> Strawberry Tree <sup>E</sup>	<i>Arbutus ‘Marina’</i> FS
<input type="checkbox"/> Sweet Bay <sup>E</sup>	<i>Laurus nobilis</i> FS, PS
<input type="checkbox"/> Sweet Gum <sup>D</sup>	<i>Liquidambar spp.</i> FS
<input type="checkbox"/> Western Redbud <sup>D</sup>	<i>Cercis occidentalis</i> FS

### Plant Guide Key:

Deciduous - D	Full Sun - FS	Monthly to No
Evergreen - E	Part Shade/Sun - PS	Water once
	Shade - SH	established - MW

## SHRUBS (woody, multi-stemmed plants under 15 feet tall.)

COMMON NAME	Botanical Name
<input type="checkbox"/> Barberry <sup>D</sup>	<i>Berberis spp.</i> FS, PS
<input type="checkbox"/> Bird of Paradise Bush <sup>D</sup>	<i>Caesalpinia spp.</i> FS, MW
<input type="checkbox"/> Bluebeard <sup>D</sup>	<i>Caryopteris clandonensis</i> FS, PS
<input type="checkbox"/> Bottlebrush <sup>E</sup>	<i>Callistemon spp.</i> FS
<input type="checkbox"/> Bush Anemone <sup>E</sup>	<i>Carpenteria californica</i> FS
<input type="checkbox"/> Bush Mallow <sup>E</sup>	<i>Lavatera spp.</i> FS
<input type="checkbox"/> Bush Morning Glory <sup>E</sup>	<i>Convolvulus cneorum</i> FS
<input type="checkbox"/> Bush Poppy <sup>E</sup>	<i>Dendromecon spp.</i> FS
<input type="checkbox"/> Butterfly Bush <sup>D</sup>	<i>Buddleja davidii</i> FS
<input type="checkbox"/> California Fuchsia <sup>E</sup>	<i>Epilobium spp.</i> FS
<input type="checkbox"/> California Holly Grape <sup>E</sup>	<i>Mahonia pinnata</i> PS, SH
<input type="checkbox"/> California Lilac <sup>E</sup>	<i>Ceanothus spp.</i> FS, MW
<input type="checkbox"/> Coastal Rosemary <sup>E</sup>	<i>Westringia fruticosa</i> FS
<input type="checkbox"/> Coffeeberry <sup>E</sup>	<i>Rhamnus californica</i> FS
<input type="checkbox"/> Cotoneaster <sup>E, D</sup>	<i>Cotoneaster spp.</i> FS, PS
<input type="checkbox"/> Coyote Bush <sup>E</sup>	<i>Baccharis pilularis</i> FS
<input type="checkbox"/> Dwarf Olive <sup>E</sup>	<i>Olea europaea</i> “Little Ollie” FS
<input type="checkbox"/> Desert Cassia <sup>D</sup>	<i>Cassia artemisioides</i> FS
<input type="checkbox"/> Emu Bush <sup>E</sup>	<i>Eremophila spp.</i> FS
<input type="checkbox"/> Euryops <sup>E</sup>	<i>Euryops spp.</i> FS, PS
<input type="checkbox"/> Evergreen Currant <sup>E</sup>	<i>Ribes viburnifolium</i> FS, PS
<input type="checkbox"/> Firethorn <sup>E</sup>	<i>Pyracantha spp.</i> FS
<input type="checkbox"/> Flannel Bush <sup>E</sup>	<i>Fremontodendron californicum</i> FS, MW
<input type="checkbox"/> Flowering Quince <sup>D</sup>	<i>Chaenomeles spp.</i> FS, PS
<input type="checkbox"/> Forsythia <sup>D</sup>	<i>Forsythia x intermedia</i> FS
<input type="checkbox"/> Grevillea <sup>E</sup>	<i>Grevillea spp.</i> FS
<input type="checkbox"/> Hairy Canary Clover <sup>E</sup>	<i>Dorycnium hirsutum</i> FS, PS
<input type="checkbox"/> Heavenly Bamboo <sup>E</sup>	<i>Nandina domestica</i> PS, SH
<input type="checkbox"/> Indian Hawthorne <sup>E</sup>	<i>Rhaphiolepis spp.</i> FS, PS
<input type="checkbox"/> Italian Buckthorn <sup>E</sup>	<i>Rhamnus alaternus</i> FS
<input type="checkbox"/> Juniper <sup>E</sup>	<i>Juniperus spp.</i> FS
<input type="checkbox"/> Kangaroo Paw <sup>E</sup>	<i>Anigozanthos spp.</i> FS, PS
<input type="checkbox"/> Kerria <sup>D</sup>	<i>Kerria japonica</i> PS
<input type="checkbox"/> Lantana <sup>D, E</sup>	<i>Lantana camara</i> FS
<input type="checkbox"/> Manzanita <sup>E</sup>	<i>Arctostaphylos spp.</i> FS
<input type="checkbox"/> Mountain Mohagany <sup>E</sup>	<i>Cercocarpus betuloides</i> FS
<input type="checkbox"/> Mugo Pine <sup>E</sup>	<i>Pinus mugo</i> FS
<input type="checkbox"/> Oleander <sup>E</sup>	<i>Nerium oleander</i> FS
<input type="checkbox"/> Photinia <sup>E</sup>	<i>Photinia spp.</i> FS
<input type="checkbox"/> Pineapple Guava <sup>E</sup>	<i>Feijoa sellowiana</i> FS
<input type="checkbox"/> Rockrose <sup>E</sup>	<i>Cistus spp.</i> FS
<input type="checkbox"/> Rosemary <sup>E</sup>	<i>Rosmarinus officinalis</i> FS

<input type="checkbox"/> Russian Olive <sup>E</sup>	<i>Elaeagnus angustifolia</i> FS
<input type="checkbox"/> Sagebrush <sup>E</sup>	<i>Artemisia spp.</i> FS
<input type="checkbox"/> Santolina <sup>E</sup>	<i>Santolina spp.</i> FS
<input type="checkbox"/> Sweet Box <sup>E</sup>	<i>Sarcococca ruscifolia</i> PS, SH
<input type="checkbox"/> Snowberry <sup>D</sup>	<i>Symphoricarpos spp.</i> FS, PS
<input type="checkbox"/> Strawberry Tree (dwarf) <sup>E</sup>	<i>Arbutus unedo</i> “Oktoberfest” FS
<input type="checkbox"/> Sugar Bush <sup>E</sup>	<i>Rhus ovata</i> FS
<input type="checkbox"/> Sweet Olive <sup>E</sup>	<i>Osmanthus fragrans</i> FS
<input type="checkbox"/> Teucrium <sup>E</sup>	<i>Teucrium spp.</i> FS
<input type="checkbox"/> Texas Ranger <sup>E</sup>	<i>Leucophyllum spp.</i> FS
<input type="checkbox"/> Toyon <sup>E</sup>	<i>Heteromeles arbutifolia</i> FS
<input type="checkbox"/> True Myrtle <sup>E</sup>	<i>Myrtus communis</i> FS, PS
<input type="checkbox"/> Xylosma <sup>E</sup>	<i>Xylosma congestum</i> FS
<input type="checkbox"/> Yew Pine <sup>E</sup>	<i>Podocarpus spp.</i> FS, PS
<input type="checkbox"/> Yucca <sup>E</sup>	<i>Yucca spp.</i> FS

## PERENNIALS & BULBS (non-woody plants that live more than 2 years.)

COMMON NAME	Botanical Name
<input type="checkbox"/> African Daisy <sup>E</sup>	<i>Osteospermum fruticosum</i> FS
<input type="checkbox"/> Agave <sup>E</sup>	<i>Agave spp.</i> FS
<input type="checkbox"/> Aloe <sup>E</sup>	<i>Aloe spp.</i> FS, PS
<input type="checkbox"/> Bearded Iris <sup>D</sup>	<i>Iris</i> FS, PS
<input type="checkbox"/> Blue Eyed Grass <sup>E</sup>	<i>Sisyrinchium bellum</i> FS
<input type="checkbox"/> Cast Iron Plant <sup>E</sup>	<i>Aspidistra elatior</i> PS, SH
<input type="checkbox"/> Coneflower <sup>D</sup>	<i>Echinacea spp.</i> FS
<input type="checkbox"/> Coral Bells <sup>E</sup>	<i>Heuchera spp.</i> PS, SH
<input type="checkbox"/> Coreopsis <sup>E</sup>	<i>Coreopsis spp.</i> FS
<input type="checkbox"/> Crete Dittany <sup>E</sup>	<i>Origanum dictamnus</i> FS
<input type="checkbox"/> Daffodill <sup>D</sup>	<i>Narcissus</i> FS
<input type="checkbox"/> Daylily <sup>D, E</sup>	<i>Hemerocallis hyb.</i> FS, PS
<input type="checkbox"/> Dusty Miller <sup>E</sup>	<i>Senecio cineraria</i> FS
<input type="checkbox"/> Gaura <sup>E</sup>	<i>Gaura lindheimeri</i> FS
<input type="checkbox"/> Geranium <sup>E</sup>	<i>Pelargonium spp.</i> FS, PS
<input type="checkbox"/> Hen and Chicks <sup>E</sup>	<i>Echeveria spp.</i> FS, PS, SH
<input type="checkbox"/> Jerusalem Sage <sup>E</sup>	<i>Phlomis spp.</i> FS
<input type="checkbox"/> Lamb’s Ears <sup>E</sup>	<i>Stachys byzantina</i> FS, PS
<input type="checkbox"/> Lavender <sup>E</sup>	<i>Lavandula spp.</i> FS
<input type="checkbox"/> Lily of the Nile <sup>E</sup>	<i>Agapanthus spp.</i> PS, SH
<input type="checkbox"/> Lily Turf <sup>D</sup>	<i>Liriope spp.</i> PS, SH
<input type="checkbox"/> Matillija Poppy <sup>D</sup>	<i>Romneya coulteri</i> FS, MW
<input type="checkbox"/> Mexican Bush Sage <sup>D</sup>	<i>Salvia leucantha</i> FS
<input type="checkbox"/> Naked Lady <sup>D</sup>	<i>Amaryllis belladonna</i> FS
<input type="checkbox"/> Penstemon <sup>E</sup>	<i>Penstemon spp.</i> FS, PS

<input type="checkbox"/> Red Hot Poker <sup>E</sup>	<i>Kniphofia uvaria</i> FS
<input type="checkbox"/> Red Yucca <sup>E</sup>	<i>Hesperaloe parviflora</i> FS
<input type="checkbox"/> Russian Sage <sup>D</sup>	<i>Perovskia atriplicifolia</i> FS
<input type="checkbox"/> Sage <sup>E</sup>	<i>Salvia spp.</i> FS
<input type="checkbox"/> Santa Barbara Daisy <sup>E</sup>	<i>Erigeron karvinskianus</i> FS, PS
<input type="checkbox"/> Pincushion Flower <sup>E</sup>	<i>Scabiosa spp.</i> FS
<input type="checkbox"/> Shrubby Monkey Flower <sup>E</sup>	<i>Mimulus aurantiacus</i> FS, PS
<input type="checkbox"/> Society Garlic <sup>E</sup>	<i>Tulbaghia violacea</i> FS, PS
<input type="checkbox"/> Verbena <sup>E</sup>	<i>Verbena spp.</i> FS, PS
<input type="checkbox"/> Wood Fern <sup>E</sup>	<i>Dryopteris spp.</i> SH
<input type="checkbox"/> Yarrow <sup>E</sup>	<i>Achillea spp.</i> FS

## GROUNDCOVERS (plants under 18 inches tall.)

COMMON NAME	Botanical Name
<input type="checkbox"/> Bearberry Cotoneaster <sup>E</sup>	<i>Cotoneaster dammeri</i> FS
<input type="checkbox"/> Blue Fescue <sup>E</sup>	<i>Festuca glauca</i> FS
<input type="checkbox"/> Buffalograss <sup>D</sup>	<i>Buchloe dactyloides</i> FS
<input type="checkbox"/> Cape Weed <sup>E</sup>	<i>Arctotheca calendula</i> FS
<input type="checkbox"/> Evergreen Candytuft <sup>E</sup>	<i>Iberis sempervirens</i> FS, PS
<input type="checkbox"/> Gazania <sup>E</sup>	<i>Gazania spp.</i> FS
<input type="checkbox"/> Ground Morning Glory <sup>E</sup>	<i>Convolvulus sabatius</i> FS, PS
<input type="checkbox"/> Knotweed <sup>D</sup>	<i>Persicaria capitata</i> FS
<input type="checkbox"/> Myoporum <sup>E</sup>	<i>Myoporum parvifolium</i> FS
<input type="checkbox"/> Snow in Summer <sup>E</sup>	<i>Cerastium tomentosum</i> FS
<input type="checkbox"/> Stonecrop <sup>E, D</sup>	<i>Sedum spp.</i> FS
<input type="checkbox"/> Sulfur Flower <sup>E</sup>	<i>Eriogonum umbellatum</i> “Shasta Sulfur” FS
<input type="checkbox"/> Thyme <sup>E</sup>	<i>Thymus spp.</i> FS
<input type="checkbox"/> Trailing Lantana <sup>D</sup>	<i>Lantana montevidensis</i> FS, PS
<input type="checkbox"/> Woolly Yarrow <sup>E</sup>	<i>Achillea tomentosa</i> FS, PS

## VINES (trailing or creeping plants that need support.)

COMMON NAME	Botanical Name
<input type="checkbox"/> Carolina Jessamine <sup>E</sup>	<i>Gelsemium sempervirens</i> FS
<input type="checkbox"/> Cat’s Claw <sup>E</sup>	<i>Macfadyena unguis-cati</i> FS
<input type="checkbox"/> Honeysuckle <sup>E</sup>	<i>Lonicera spp.</i> FS
<input type="checkbox"/> Lady Bank’s Climbing Rose <sup>D</sup>	<i>Rosa banksiae</i> FS
<input type="checkbox"/> Potato Vine <sup>E</sup>	<i>Solanum jasminoides</i> FS, PS
<input type="checkbox"/> Star Jasmine <sup>E</sup>	<i>Trachelospermum jasminoides</i> FS, PS, SH
<input type="checkbox"/> Wisteria <sup>D</sup>	<i>Wisteria sinensis</i> FS